



Bioinformatics Training at Edinburgh Genomics

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Training and Outreach Bioinformatician
Edinburgh Genomics

Edinburgh Genomics

- Genomics facility based at the University of Edinburgh
- Available for collaborations on an academic, non-profit basis
- Formed from merger of

- ARK-Genomics
- The GenePool



- Funded by three major bio UK research councils



- A range of technologies and expertise available



<http://genomics.ed.ac.uk>

ILLUMINA HiSeq:



36-150 bp reads
18-180 Gb per run
7-40h per run

6 human genomes @ 40x per day
Coming soon – 250 bp reads
Coming soon – 1 Tb per 6-day run

ILLUMINA MiSeq:



36-300 bp reads
0.5-15 Gb per run
4-65h per run

550 bp contiguous sequence with paired-end reads

Automation:



96 DNA-seq libraries in 1 day
96 RNA-seq libraries in 2 days

- 0.25 PB ultra-secure Isilon data storage
- Powerful SGE (Sun Grid Engine) cluster:
 - Several hundred cores
 - 2 TB RAM
- Access to ECDF (Edinburgh Compute and Data Facilities)
 - Over 3000 cores
 - Several TB RAM
- Experience with Amazon EC2



- Dedicated bioinformatics training suite
- We can deliver training courses on a variety of topics:
 - Unix/Linux, Perl, Python, R, the Grid and the Cloud
 - Next Generation Sequencing, genome assembly, RNAseq, ChIPseq, RADseq, variant calling
 - Galaxy, Genomatix, genome browsers
etc. etc.
- We are planning to give the first Next Generation Sequencing course in June

- But what training is actually needed?
- You can help us by:
 - completing the survey that I will hand out
 - talking to me (Bert.Overduin@ed.ac.uk) about your bioinformatics training needs
- Thank you for your cooperation!